PRTC110
DIFFERENTIAL PRESSURE AND THERMOCOUPLE TEMPERATURE DATA LOGGER

VALUTEMP PTE LTD
WARMS YOUR HEART

Features
- 5 year battery life
- Wide temperature range
- Accepts thermocouple types
  J, K, T, E, R, S, B, N
- High speed download
- NIST traceable
- Real time operation
- Low cost
- Programmable start time
- Miniature size

Applications
- R&D
- Diagnostics
- Measure Pressure and Temperature Pipelines
- Clean Rooms
- Atmospheric pressure gradient monitoring

The PRTC110 is a differential pressure and temperature data logger, ideal for use in factory and laboratory applications. The device is available in a 0 to 2inH2O or 0 to 5inH2O model.
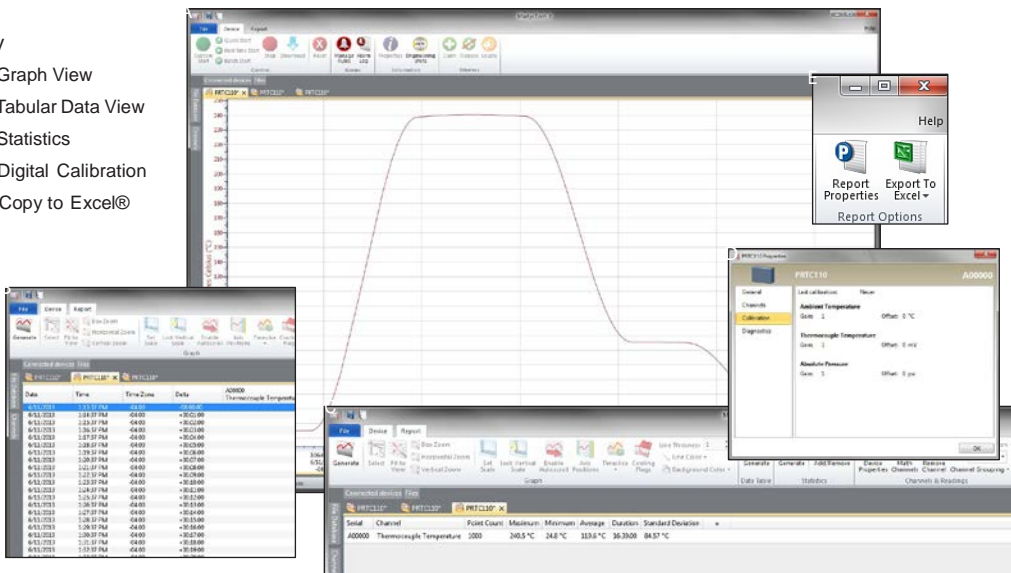
The PRTC110 features a real-time clock module that extends the battery life up to 5 years and allows for high speed downloads. This device will measure and record up to 10,922 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The PRTC110 can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

The PRTC110 makes data retrieval quick and easy. Simply plug the device into an empty COM or USB port and our user-friendly software does the rest.

MADGETECH DATA LOGGER SOFTWARE

Key
- Graph View
- Tabular Data View
- Statistics
- Digital Calibration
- Copy to Excel®

Software Features:
- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view
- Multilingual

PRTC110 SPECIFICATIONS*

Internal Channel

Temperature Range:	-20 ºC to +80 ºC (-4 ºF to +176 ºF)
Temperature Resolution:	0.1 ºC (0.18 ºF)
Calibrated Accuracy:	±0.5 ºC (0 ºC to 50 ºC)

Remote Channel

Thermocouple Types:	J, K, T, E, R, S, B, N
Thermocouple connection:	Mini U connector
Cold Junction Compensation:	Automatic, based on internal channel
Maximum thermocouple Resistance:	1000 Ω, <1000 Ω recommended

**Thermocouple Type:	Range (ºC)	Resolution	Accuracy
J	-210 to +760	0.1 ºC	±0.5 ºC
K	-270 to +1370	0.1 ºC	±0.5 ºC
T	-270 to +400	0.1 ºC	±0.5 ºC
E	-270 to +980	0.1 ºC	±0.5 ºC
R	-50 to +1760	0.1 ºC	±2.0 ºC
S	-50 to +1760	0.1 ºC	±2.0 ºC
B	+50 to +1820	0.1 ºC	±2.0 ºC
N	-270 to +1300	0.1 ºC	±0.5 ºC
Voltage	-75 mV to +75 mV	5 µV	±20 µV

**Accuracy specifications based on 3-meter 24 AWG thermocouple.

Pressure Range (nominal):	0 to 2 inH2O and 0 to 5 inH2O (differential)
Pressure Range (max):	-2 to +4inH2O and –2 to +8inH2O (differential)
Pressure Resolution:	0.002 inH2O and 0.005 inH2O
Pressure Specified Accuracy:	Nominal Range at +25 ºC (+77 ºF)

Combined Calibration Accuracy:	±5.0% FSR max at 25 ºC over 1 year
Start Modes:	Software programmable immediate start or delay start up to six months in advance
Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	10,922 readings per channel; software configurable memory wrap
Reading Rate:	2 seconds to 24 hours, selectable in software
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included, user replaceable
Battery Life:	5 year typical (5 minute, 25 ºC)
Data Format:	Date and time stamped ºC, ºF, ºK, ºR; inH2O, PSIG, inHg, mmHg, bar, atm, Torr, Pa, kPa, MPa
Time Accuracy:	±1 minute/month (at 20 ºC to 30 ºC)
Computer Interface:	PC serial or USB (interface cable required); 57,600 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-20 ºC to +80 ºC (-4 ºF to +176 ºF), 0 %RH to 95 %RH non-condensing
Dimensions:	2.7 in x 1.6 in x 0.8 in (68 mm x 41 mm x 20 mm) plus connective tubing
Enclosure:	ABS Plastic
Weight:	8.8 oz (250 g)
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212 °F, INCINERATE OR EXPOSE CONTENTS TO WATER

ORDERING INFORMATION

MODEL	DESCRIPTION
PRTC110-2inH2O	2inH2O Differential Pressure and Thermocouple Temperature Recorder
PRTC110-5inH2O	5inH2O Differential Pressure and Thermocouple Temperature Recorder
IFC110	Software, manual and RS232 interface cable
IFC200	Software, manual and USB interface cable
NIST	NIST Calibration Certificate
LTC-7PN	Replacement battery for PRTC110

*To order the product with the NIST certificate add -CERT to the end of the part number.

ASK ABOUT OUR OTHER DATA LOGGERS

Temperature
Humidity
Pressure
pH
Level
Shock
LCD Display
Pulse/Event/State
Current
Voltage Wireless
Intrinsically Safe
Spectral Vibration
Motion

For enquiries, please contact sales@valutemp.com.sg or visit our website at www.valutemp.net